



THE UNIVERSITY OF SYDNEY
LEES 1 PROJECT

SUMMARY OF DESIGN REFINEMENTS

SUPPLEMENTARY ARCHITECTURAL DESIGN STATEMENT
PREPARED FOR THE UNIVERSITY OF SYDNEY

MAY 2016



RICHARD CROOKES
CONSTRUCTIONS *40*
years



PREPARED FOR
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EXECUTIVE SUMMARY

The consultation process for the LEES1 development application instigated a number of discussions regarding the nature and legacy of Eastern Avenue, and how both the LEES1 and F23 projects should respond - both individually and in concert.

Our original design intent for the LEES1 building was to define this new gateway project in the typology of a campus building (rather than a street-wall building) - not ignoring the reality of a defined edge condition to the Eastern Avenue alignment, but resolving it to help articulate the shared-space nature of the campus rather than the hard edges of the city.

Through a review process facilitated by Howard Tanner, the design team and University re-tested the original proposal against other ways of resolving the Eastern Avenue alignment.

The original intention was upheld as being the strongest response, but a decision was made to moderate the magnitude of the cantilever articulation which softened the impact on views along Eastern Avenue.

A re-working of the building layout to support this move has also led to improvements in the expression of the building entry onto the City Road address, and clearer opportunities for interfacing with future options regarding the pedestrian bridge and other ways of crossing City Road.

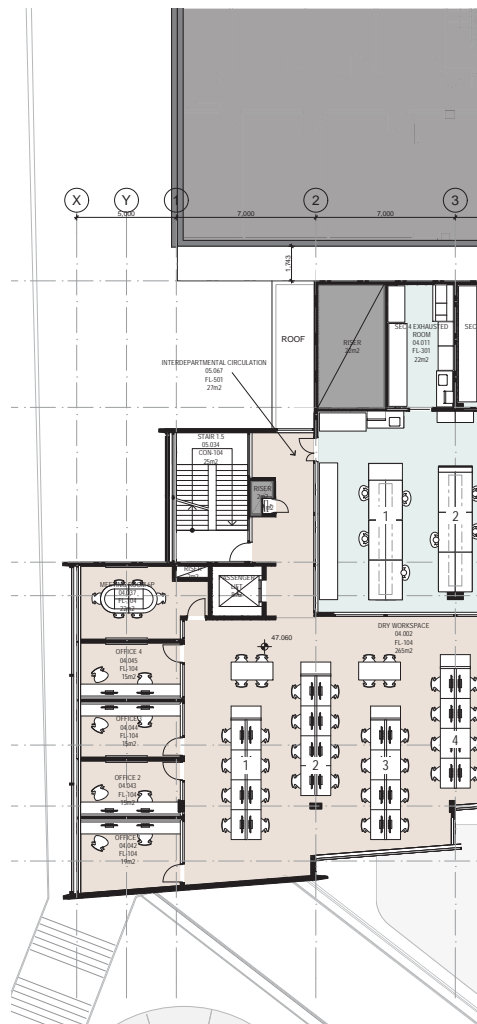


SUMMARY OF REFINEMENTS

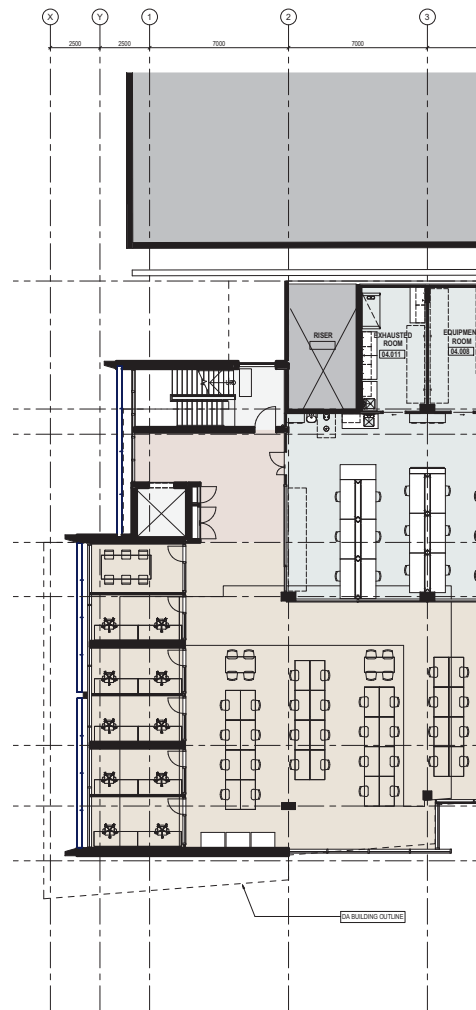
EASTERN AVENUE ALIGNMENT - UPPER LEVELS

The revised Eastern Avenue alignment reduces the extent of the western cantilever edge by approximately 1.5m. The perceptual impact is reduced further by reconsidering the expression of the projecting blade walls relative to the position of the floor plate edge and shading devices.

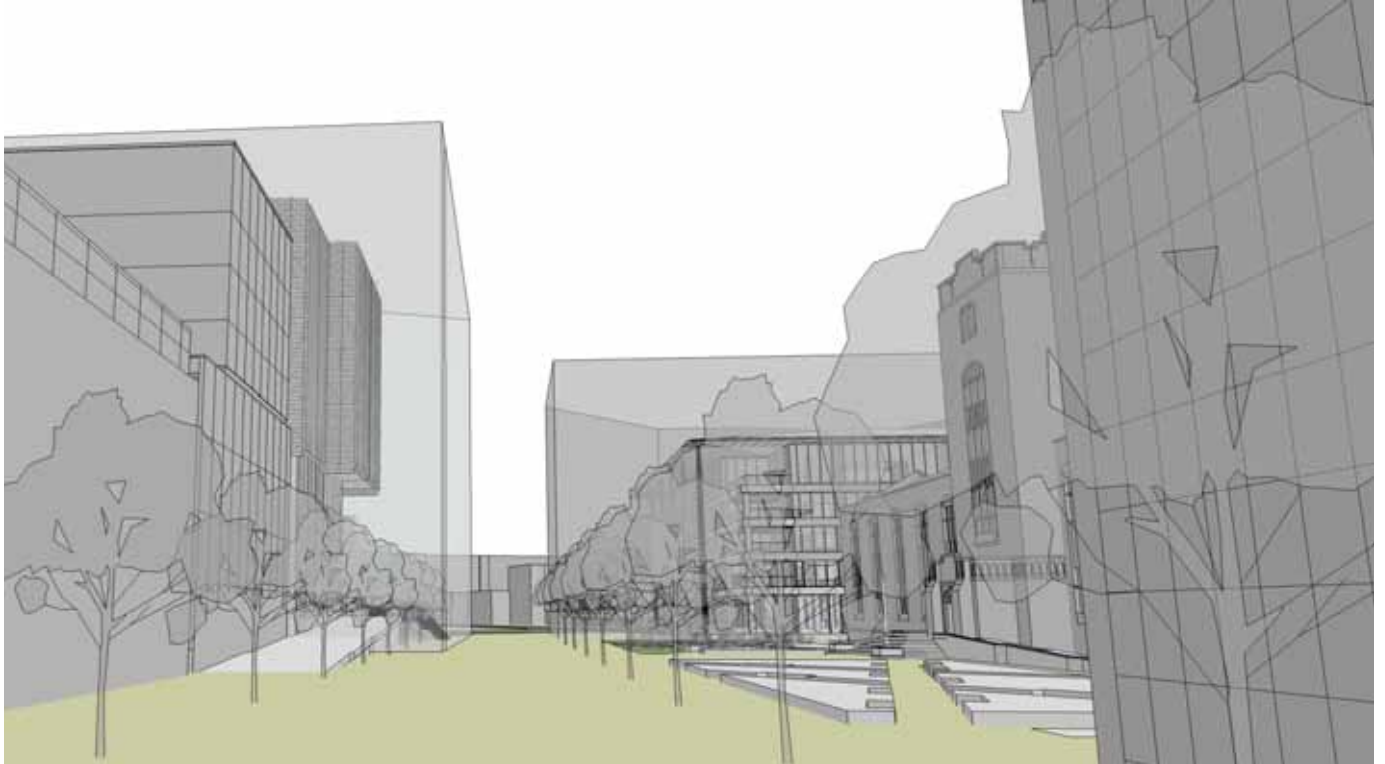
Additionally, the extent of the cantilever to the south-western corner has been reduced, and the southern facade alignment at upper levels has been brought to an orthogonal geometry. The original design had played the southern facade line to reduce the apparent mass, but the new cantilever profile resolves this with a simpler geometry.



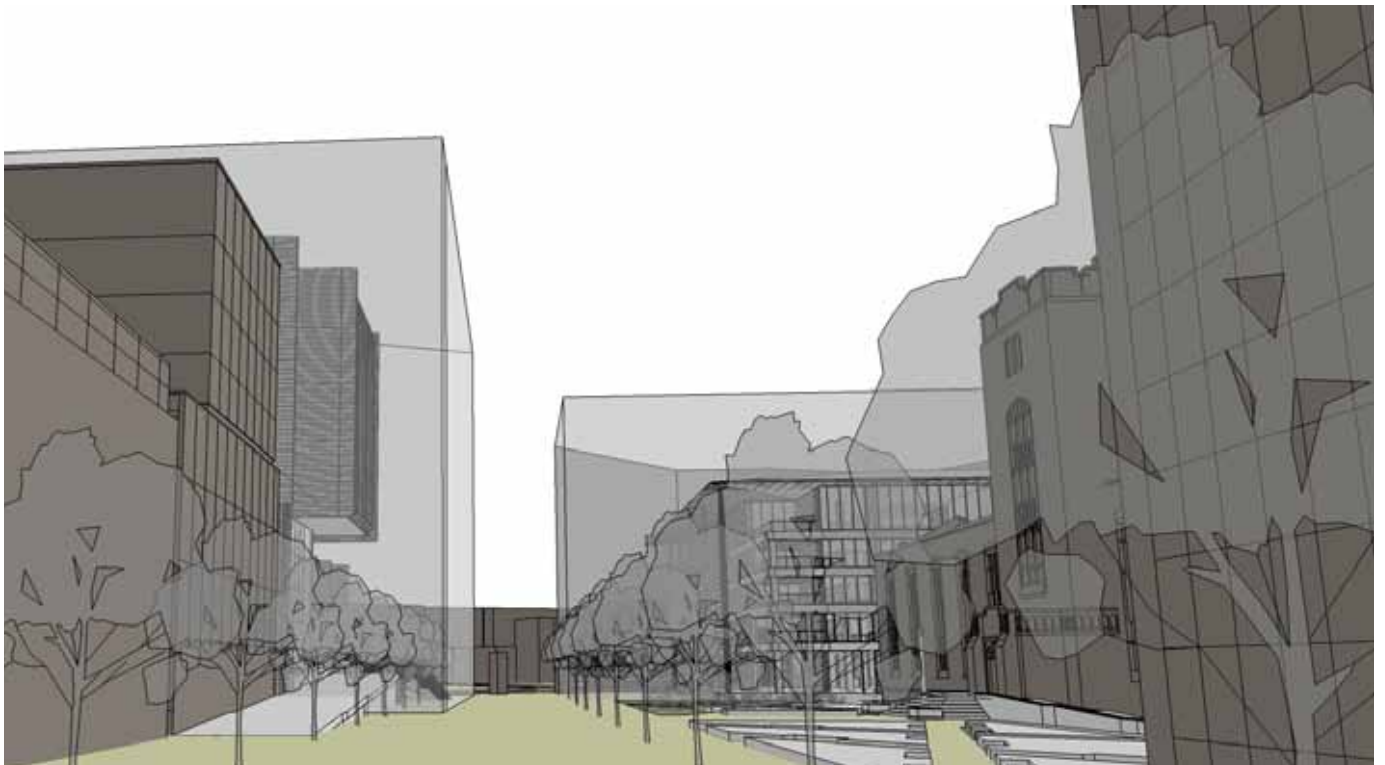
Original Eastern Avenue interface - typical upper level plan



Revised design for the Eastern Avenue interface - typical upper level plan



Revised design for the Eastern Avenue interface



Original Eastern Avenue interface

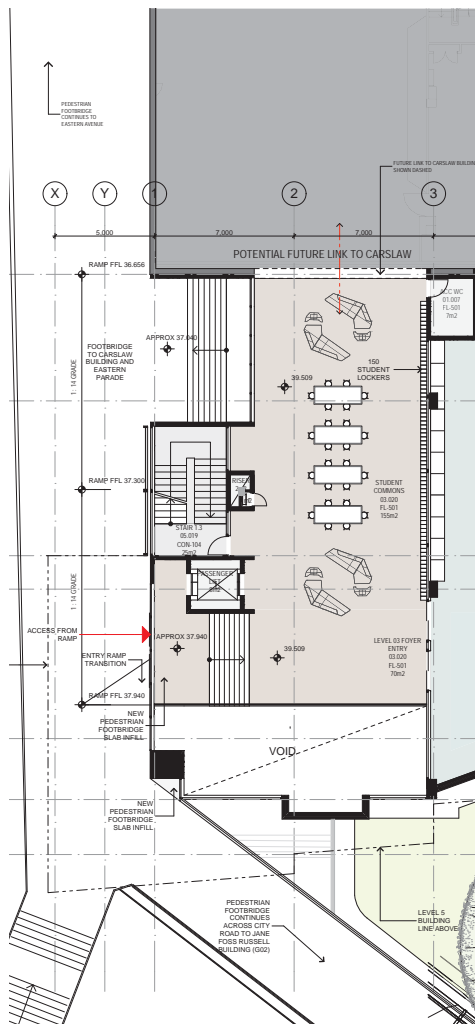
SUMMARY OF REFINEMENTS

EASTERN AVENUE ALIGNMENT - LOWER LEVELS

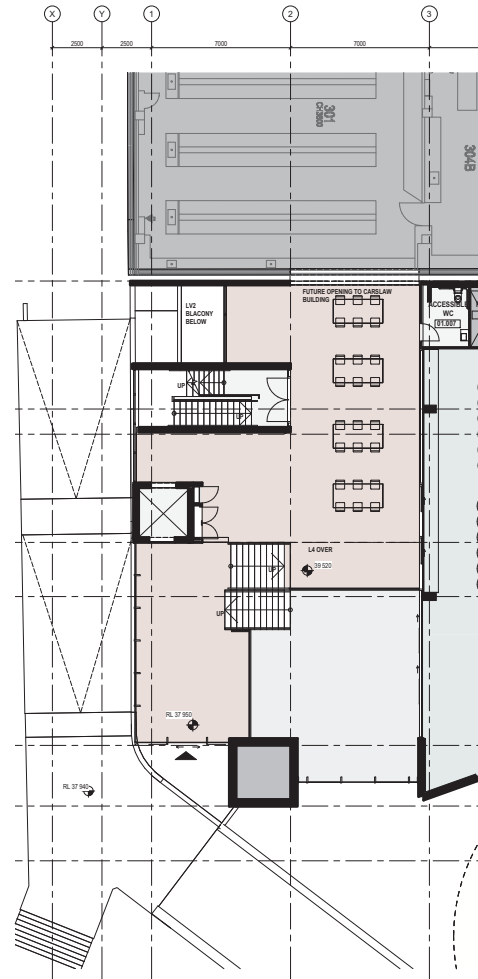
At lower levels, the revised planning has provided an improved access from the City Road bridge level into the building. Additionally, stairs accessing both Level 3 and Level 2 allow improved connectivity to the floors that interface directly with the campus.

The void at the entry which provides deep views between teaching labs and campus has been improved spatially, and has a more legible presence to the south of the building.

A stair access between the LEES1 and existing Carlslaw building has been omitted in the new design in favor of expanding the length of opening to the main foyer.



Original Eastern Avenue interface - level 3 (bridge interface) plan



Revised design for the Eastern Avenue interface - level 3 (bridge interface) plan



Revised design for the Eastern Avenue interface



Original Eastern Avenue interface



Revised design for the Eastern Avenue elevation



Original Eastern Avenue elevation

SUMMARY OF DESIGN STUDIES

In order to provide certainty that the mass articulation of the LEES1 design was the correct strategy for the campus a number of resolutions to the Eastern Avenue address were investigated. Many of these had been assessed in the original design phase, but were re-worked to provide way of visually comparing their relative merits.

This section provides a summary of the key options that were developed and discussed within the design team, Sydney University, and Howard Tanner in a review role, and formed the basis of a final design recommendation.

The revised DA design has been developed on the basis of this recommendation.

EASTERN AVENUE VISUAL ASSESSMENT



1. Original DA design

The benchmark massing from the original DA design.



2. '0 alignment' study

The '0 alignment' facade was not preferred due to:

- awkward resolution of southern facade articulation between upper and lower levels;
- propagation of unarticulated massing on Eastern Avenue;
- poor articulation of mass as conclusion to Eastern Avenue views.



3. Reduced cantilever study

The reduced cantilever facade became the preferred design to the retention of the positive design merits of the original DA design, while providing a more sensitive resolution within the views along Eastern Avenue.



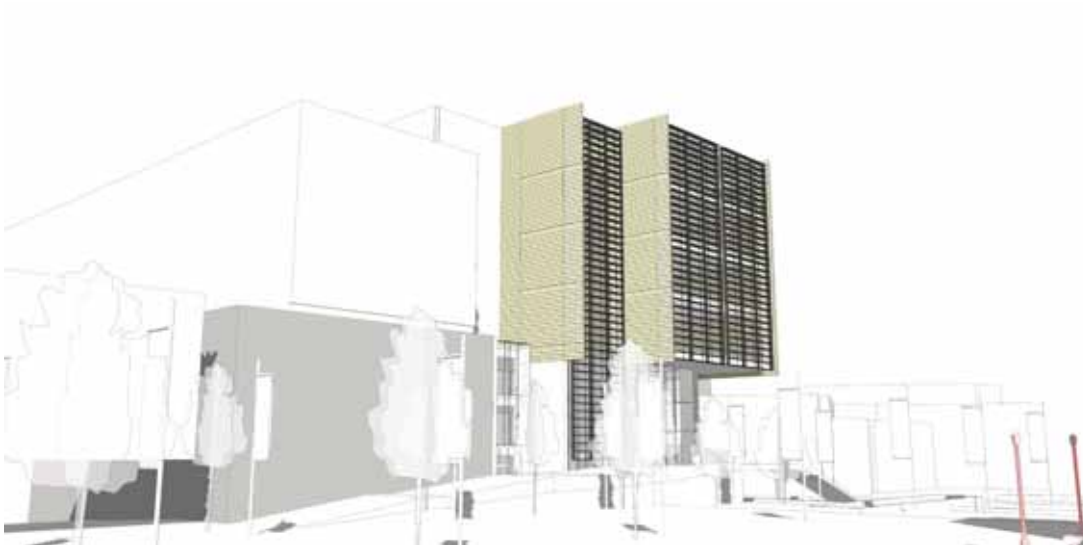
4. Stepped cantilever study

While providing an well mannered and expressively intentioned resolution to the design, the stepped cantilever was not preferred due to increased visual complexity in other views, and awkward resolution of the corner due to the relationships between elements in the upper and lower levels.

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SUMMARY OF DESIGN STUDIES

VIEW FROM MADSEN ENTRY VISUAL ASSESSMENT



1. Original DA design

The benchmark massing from the original DA design.



2. '0 alignment' study

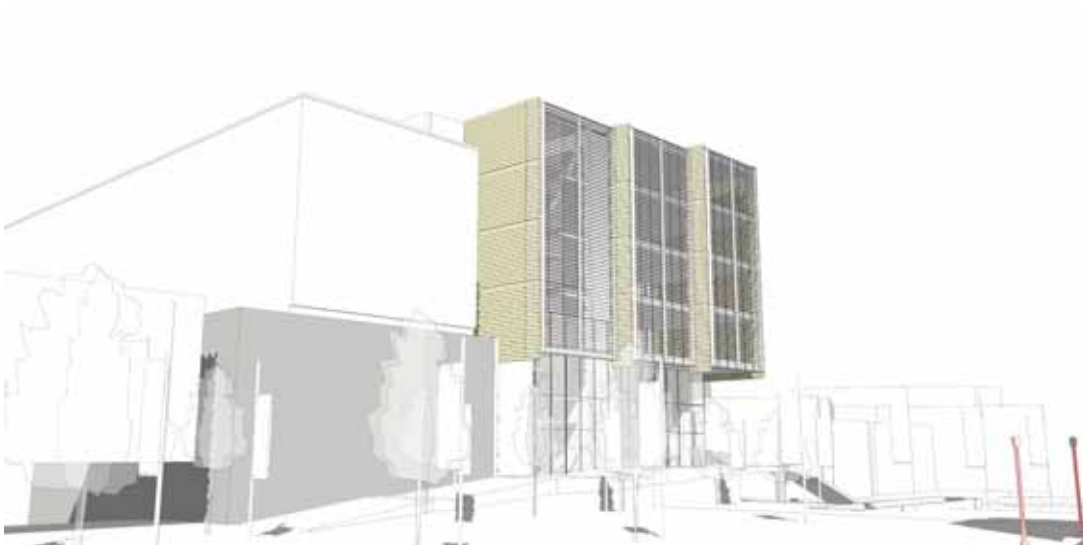
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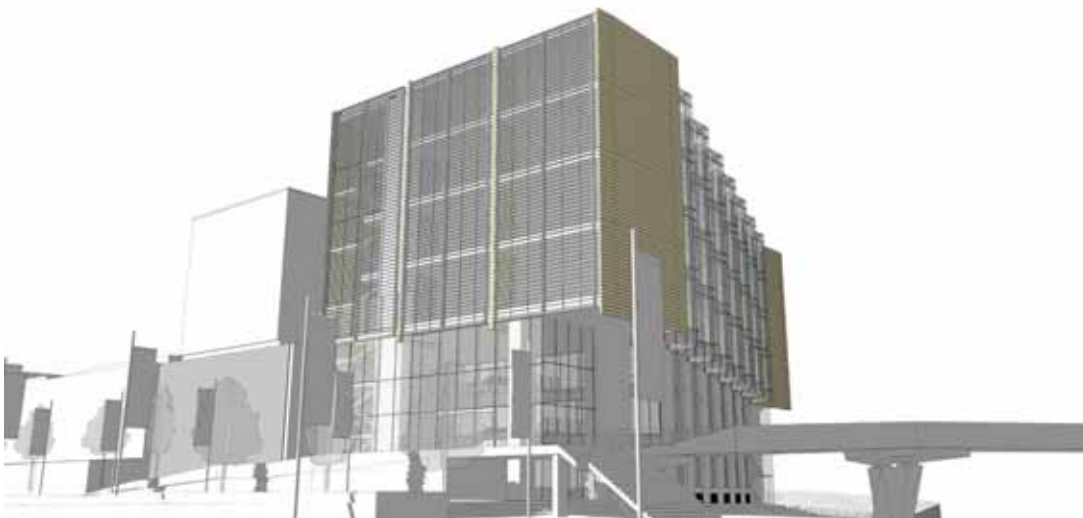
SUMMARY OF DESIGN STUDIES

VIEW FROM CITY ROAD / EASTERN AVENUE JUNCTION VISUAL ASSESSMENT



1. Original DA design

The benchmark massing from the original DA design.



2. 'O alignment' study

The 'O alignment' facade was not preferred due to:

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SUMMARY OF DESIGN STUDIES

DESIGN RESOLUTION FROM STUDIES TO REVISED DA

Most studies well well-progressed to ensure a valid relative assessment could be made.

From the preferred study of the 'reduced' cantilever scheme', changes include:

- minor refinements to the setout of the facade geometry;
- definition of the lift core on the western facade.

A visual comparison below demonstrates the refinement for the final revised design, as developed from the original study model.



Revised design for the Eastern Avenue elevation



Original preferred study model of the 'reduced cantilever' scheme